<u>IN THE CLAIMS:</u>

Please AMEND claims 1, 5, 7, and 11, as follows. For the Examiner's convenience, all claims currently presented are reproduced below.

1. (Currently Amended) A method of measuring a position of a surface of an object while the object is scanned relative to a detection unit in a scanning direction in an X-Y plane, the detection unit being configured to detect the position of the surface in a Z direction perpendicular to the X-Y plane, said method comprising:

a detecting step of scanning the object relative to the detection unit in two scanning directions, in the X-Y plane, opposite to each other, and detecting, using the detection unit, with respect to each of the two scanning directions, a position of the surface in the Z direction for the same detection point on the surface;

a calculating step of calculating a correction value for correcting a position of the surface to be detected by the detection unit, based on the positions of the surface detected for the same detection point, with respect to the two scanning directions in said detecting step; and

a correcting step of correcting the position of the surface detected by the detection unit while the object is scanned relative to the detection unit in one of the two scanning directions, with the correction value obtained in said calculating step.

2. (Previously Presented) A method according to claim 1, wherein the object is a semiconductor wafer.

3. (Canceled)

4. (Previously Presented) A method according to claim 1, wherein said detecting step detects the position of the surface with respect to each of a plurality of sample shot regions on the surface.

5. (Currently Amended) A method according to claim 1, wherein, in said calculating step, the positions of the surface detected in said detecting step with respect to the two scanning directions are ~~weight averaged~~ weighted-averaged, and the correction value is calculated based on the weighted average.

6. (Previously Presented) A method according to claim 4, wherein, in said calculating step, data of the position of the surface to be used for calculation of the correction value is chosen based on a difference between the positions of the surface detected for the same point with respect to the two scanning directions in said detecting step.

7. (Currently Amended) A measuring apparatus for measuring a position of a surface of an object while the object is scanned in a scanning direction in an X-Y plane, said apparatus comprising:

a detecting unit configured to detect the position of the surface of the object in a Z direction perpendicular to the X-Y plane;

a stage configured to scan the object relative to said detecting unit in the scanning direction; and

a controller configured to cause said stage to scan the object relative to said detecting unit in two scanning directions, in the X-Y plane, opposite to each other, to detect, using said detecting unit, with respect to each of the two scanning directions, a position of the surface in the Z direction for the same detection point on the surface, to calculate a correction value for correcting a position of the surface to be detected by said detecting unit while the object is scanned relative to said detecting unit in one of the two scanning directions, based on the positions of the surface detected for the same detection point with respect to the two scanning directions, and to correct the position of the surface detected by said detecting unit while the object is scanned relative to said detecting unit in the one of the two scanning directions, with the calculated correction value.

8. (Previously Presented) A measuring apparatus according to claim 7, wherein the object is a semiconductor wafer.

9. (Canceled)

10. (Previously Presented) A measuring apparatus according to claim 7, wherein said controller is configured to cause said detecting unit to detect the position of the surface with respect to each of a plurality of sample shot regions on the surface.

11. (Currently Amended) A measuring apparatus according to claim 7, wherein said controller is configured to ~~weight average~~ weighted-average the positions of the surface detected for the same point with respect to the two scanning directions, and to calculate the correction value based on the weighted average.

12. (Previously Presented) A measuring apparatus according to claim 10, wherein said controller is configured to choose data of the position of the surface to be used for calculation of the correction value, based on a difference between the positions of the surface detected for the same position with respect to the two scanning directions.

13. (Previously Presented) An exposure apparatus for scanning an object in a scanning direction in an X-Y plane, measuring a position of a surface of the object, which is scanning, in a Z direction perpendicular to the X-Y plane, moving the object, which is scanning, in the Z direction based on the measured position, and exposing the object, which is scanning and moving, to a pattern, said apparatus comprising:

a measuring apparatus, according to claim 7, for measuring the position of the surface of the object.

14. (Canceled)

15. (Previously Presented) A method of manufacturing a device, said method comprising:

exposing an object to a pattern by use of an exposure apparatus defined in claim 13;

developing the exposed object; and

processing the developed object to manufacture the device.